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629 Playground-Related Injuries in Preschool-Aged Children — United States, 1983–1987

637 Ectopic Pregnancy — United States, 1984 and 1985

Current Trends

Playground-Related Injuries in Preschool-Aged Children — United States, 1983–1987

From 1983 to 1987, nearly 6.72 million emergency room visits in the United States were for product-related injuries among preschool children 1–4 years old.* Approximately 305,000 (4.5%) of these injuries involved playground equipment. These playground equipment-related injuries occurred most frequently at home (38.3%), in sports or recreation settings (29.4%), or at school (8.9%) (Table 1). Of the 82,108 injuries in preschool-aged children attending day care (coded as occurring at school), 27,232 (33.2%) were related to playground equipment (Table 1).

*This estimate is based on data from the National Electronic Injury Surveillance System (NEISS) of the U.S. Consumer Product Safety Commission (CPSC). Sixty-two hospitals with emergency rooms located throughout the United States contribute to this data base. When weighted, the reports from NEISS reflect national estimates of persons with product-related injuries treated in hospital emergency rooms.

TABLE 1. Playground-related and other injuries in preschool-aged children, by locale — United States, 1983–1987

Locale	Playground-related injuries		Other injuries	
	No.	(%)	No.	(%)
Any home*	116,963	(38.3)	5,262,909	(82.1)
Sports or recreation setting	89,631	(29.4)	74,269	(1.2)
School	27,232	(8.9)	54,876	(0.9)
Other†	24,383	(8.0)	350,972	(5.5)
Unknown	47,072	(15.4)	668,570	(10.4)
Total	**305,281**	**(100.0)**	**6,411,596**	**(100.0)**

*Includes injuries occurring inside or outside a house, farmhouse (not farm-related), apartment, condominium, or mobile home.
†Includes injuries occurring at a street, highway, store, office building, restaurant, church, farm, or industrial place.

Injuries – Continued

Most preschool-aged children with injuries involving school playground equipment were 3 or 4 years old and male (Table 2). A higher proportion of playground-related injuries occurred in the spring than at other times of the year (Table 2). Forty percent of playground-related injuries were associated with climbing apparatus, and two thirds of injuries were to the head and neck (Table 2).

Lacerations (38.5%), contusions or abrasions (26.8%), fractures (16.8%), strains or sprains (4.4%), and concussions (1.7%) were most commonly reported (Table 2). Head and neck injuries were primarily lacerations (55.7%) and contusions or abrasions (23.7%). Injury to the extremities and trunk included mostly fractures, contusions or abrasions, and strains or sprains (upper extremity—62.4%, 22.2%, and 12.2%; lower extremity—31.4%, 42.2%, and 15.4%; trunk—27.7%, 51.2%, and 9.2%, respectively). Approximately 5.3% of preschool-aged children treated in emergency rooms for playground-related injuries required hospitalization.

Reported by: Div of Injury Epidemiology and Control, Center for Environmental Health and Injury Control, CDC.

Editorial Note: By 1984, more than 11 million children attended day-care facilities (*1*). The potential injury hazards of organized day care and day-care playgrounds

TABLE 2. School playground-related injuries in children aged 1–4 years, by selected items – United States, 1983–1987

Characteristic	Playground-related injuries No.*	(%)	Characteristic	Playground-related injuries No.*	(%)
Age (yrs)			Location of injury		
1	1,154	(4.2)	Head and neck[§]	18,099	(66.5)
2	4,557	(16.7)	Upper extremity	5,021	(18.4)
3	9,015	(33.1)	Lower extremity	2,027	(7.4)
4	12,506	(45.9)	Trunk	1,858	(6.8)
Sex			Multiple sites	228	(0.8)
Male	15,195	(55.8)			
Female	12,038	(44.2)	Injury diagnosis		
Season			Laceration	10,471	(38.5)
Spring	9,211	(33.8)	Contusion/abrasion	7,309	(26.8)
Summer	5,279	(19.4)	Fracture	4,581	(16.8)
Fall	6,275	(23.0)	Strain/sprain	1,209	(4.4)
Winter	6,466	(23.7)	Concussion	468	(1.7)
Type of equipment			Other	3,081	(11.3)
Climbing apparatus	11,027	(40.5)	Unknown	114	(0.4)
Slide/sliding board[†]	7,043	(25.9)			
Swing/swing set	4,956	(18.2)			
Seesaw/teeterboard	1,302	(4.8)			
Other	2,905	(10.7)			

*These are national estimates of product-related injuries treated in hospital emergency rooms using data from the National Electronic Injury Surveillance System.
†Excluding swimming pools and ground water slides.
§Including the face and mouth.

Injuries – Continued

have been documented (*2–5*). The NEISS data suggest that further improvements in playground safety are needed to reduce playground-related injuries.

NEISS provides a data base for estimating injuries associated with playground equipment in young children in day-care facilities. However, these data are limited in that, by using "school" as the location to represent day-care playgrounds, they exclude children injured in day care at a home, church, or building other than a school. Conversely, some injuries that reportedly took place at school possibly occurred to children using a school playground but not attending day care. Interpreting these data is also difficult because the type, size, and cost of equipment at a school playground differ from those used in homes, churches, or private day care. Thus, the distribution by type of equipment in the overall day-care environment may vary considerably from that described here.

A CPSC-sponsored hazard analysis showed that falls to the ground surface account for 60% of playground equipment-related injuries (*6*). A 1-foot fall directly on the head onto concrete or asphalt or a 4-foot fall onto packed earth can be fatal (*7–9*). In contrast, surfaces made of energy-absorbing mats or loose materials such as wood chips or sand may reduce the likelihood of head injury even from falls of 8 feet (*7,8*). Yet over 48% of day-care playground equipment is not installed over impact-absorbing surfaces (*2,3*). Although in some cases the Occupational Safety and Health Administration requires that guard rails be installed to protect workers as low as 4 feet above ground level, no such protective legislation exists for children on playground equipment, some of which is more than 10 feet above the ground (*8*).

Injury control programs should address the safety aspects of public and other playgrounds for all ages. According to NEISS data, 994,678 injuries in all age groups from 1983 to 1987 were associated with playground equipment; 243,807 (24.5%) of these injuries occurred at schools, and 257,070 (25.8%), at places of recreation. Recommendations to improve playground safety include installing playground equipment over energy-absorbing surfaces, locating the equipment away from obstructions, properly anchoring the equipment, checking the integrity of the equipment frequently, covering protrusions, removing broken equipment promptly, and instructing and supervising children in proper playground use (*10,11*). If wood chips or sand are used as surfacing, they should be well maintained and not allowed to compact or fall below an adequate depth. Limiting the height of playground equipment may also be helpful. Parents should consider the safety aspects of playgrounds in day-care centers, schools, and public areas before allowing their children to use them.

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Injuries — Continued

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TABLE I. Summary — cases of specified notifiable diseases, United States

Disease	41st Week Ending			Cumulative, 41st Week Ending		
	Oct. 15, 1988	Oct. 17, 1987	Median 1983-1987	Oct. 15, 1988	Oct. 17, 1987	Median 1983-1987
Acquired Immunodeficiency Syndrome (AIDS)	401	U*	201	24,155	15,098	6,254
Aseptic meningitis	140	335	343	4,831	9,129	8,201
Encephalitis: Primary (arthropod-borne & unspec)	13	56	50	615	1,052	1,002
Post-infectious	2	1	2	102	87	89
Gonorrhea: Civilian	12,624	16,074	16,870	543,469	611,899	697,225
Military	122	200	295	9,153	12,872	16,528
Hepatitis: Type A	495	551	536	19,854	19,397	17,577
Type B	365	502	522	17,661	20,032	20,159
Non A, Non B	38	72	72	2,002	2,385	2,797
Unspecified	51	48	120	1,713	2,480	3,930
Legionellosis	16	17	12	737	758	586
Leprosy	-	-	2	121	158	195
Malaria	21	21	21	774	732	757
Measles: Total†	38	66	35	2,382	3,434	2,557
Indigenous	36	66	34	2,146	3,028	2,130
Imported	2	-	1	236	406	292
Meningococcal infections	35	44	38	2,268	2,299	2,170
Mumps	42	218	50	3,717	10,893	2,623
Pertussis	76	63	63	2,123	2,002	2,002
Rubella (German measles)	2	6	6	182	314	571
Syphilis (Primary & Secondary): Civilian	667	815	528	31,634	27,821	21,918
Military	3	-	1	129	133	139
Toxic Shock syndrome	9	11	6	270	271	301
Tuberculosis	379	409	412	16,678	16,705	16,711
Tularemia	1	3	5	153	167	167
Typhoid Fever	12	7	13	298	264	276
Typhus fever, tick-borne (RMSF)	8	11	13	567	546	658
Rabies, animal	76	79	95	3,421	3,842	4,296

TABLE II. Notifiable diseases of low frequency, United States

	Cum. 1988		Cum. 1988
Anthrax	-	Leptospirosis (Ohio 1)	28
Botulism: Foodborne	18	Plague	14
Infant	28	Poliomyelitis, Paralytic	-
Other	3	Psittacosis (Mich. 2, S.C. 1)	71
Brucellosis (Calif. 1)	52	Rabies, human	-
Cholera	4	Tetanus (Ill. 1, Wash. 1)	41
Congenital rubella syndrome	3	Trichinosis	38
Congenital syphilis, ages < 1 year	302		
Diphtheria	-		

*Because AIDS cases are not received weekly from all reporting areas, comparison of weekly figures may be misleading.
†Two of the 38 reported cases for this week were imported from a foreign country or can be directly traceable to a known internationally imported case within two generations.

TABLE III. Cases of specified notifiable diseases, United States, weeks ending October 15, 1988 and October 17, 1987 (41st Week)

Reporting Area	AIDS	Aseptic Meningitis	Encephalitis		Gonorrhea (Civilian)		Hepatitis (Viral), by type				Legionellosis	Leprosy
			Primary	Post-infectious			A	B	NA,NB	Unspecified		
	Cum. 1988	Cum. 1988	Cum. 1988	Cum. 1988	Cum. 1988	Cum. 1987	Cum. 1988	Cum. 1988	Cum. 1988	Cum. 1988	Cum. 1988	Cum. 1988
UNITED STATES	24,155	4,831	615	102	543,469	611,899	19,854	17,661	2,002	1,713	737	121
NEW ENGLAND	996	313	21	4	17,074	18,757	675	946	104	71	41	15
Maine	26	15	1	-	332	556	17	45	4	1	4	-
N.H.	31	38	1	3	206	314	38	62	7	4	4	-
Vt.	10	18	6	-	100	177	13	31	6	4	3	-
Mass.	533	128	8	1	5,801	6,601	321	585	70	47	27	14
R.I.	65	70	-	-	1,545	1,714	74	68	10	-	3	1
Conn.	331	44	5	-	9,090	9,395	212	155	7	15	-	-
MID. ATLANTIC	7,992	486	51	4	86,046	95,056	1,432	2,525	145	231	185	8
Upstate N.Y.	1,028	290	32	1	12,018	13,791	593	611	57	19	73	-
N.Y. City	4,399	114	8	3	36,814	48,922	265	1,035	12	163	35	7
N.J.	1,944	61	11	-	12,227	13,280	293	590	50	35	40	1
Pa.	621	-	-	-	24,987	19,063	281	289	26	14	37	-
E.N. CENTRAL	1,725	777	155	12	91,608	94,329	1,311	1,871	179	96	161	4
Ohio	391	266	53	3	20,881	20,629	279	427	30	17	59	-
Ind.	80	76	17	-	7,082	7,327	129	267	18	20	18	-
Ill.	806	79	32	9	27,323	28,633	384	417	63	22	-	3
Mich.	356	319	38	-	29,438	29,548	319	551	45	34	52	-
Wis.	92	37	15	-	6,884	8,192	200	209	23	3	32	1
W.N. CENTRAL	565	197	45	11	23,152	24,673	1,130	818	87	28	63	1
Minn.	134	29	11	3	3,117	3,756	87	112	18	3	3	-
Iowa	35	32	9	3	1,716	2,419	39	72	13	2	16	-
Mo.	277	75	1	-	13,233	12,911	667	476	37	14	15	-
N. Dak.	4	-	4	-	137	233	6	9	3	5	1	-
S. Dak.	5	16	5	2	406	483	12	4	2	-	14	-
Nebr.	33	11	9	2	1,284	1,587	45	40	2	-	5	-
Kans.	77	34	6	1	3,259	3,274	274	105	12	4	9	1
S. ATLANTIC	4,254	1,049	89	36	153,317	160,092	1,886	3,644	308	252	114	1
Del.	60	32	3	-	2,410	2,696	37	116	7	3	13	-
Md.	453	161	8	3	15,643	18,100	239	556	34	23	17	1
D.C.	385	17	1	1	11,538	10,631	16	38	3	1	1	-
Va.	285	126	27	4	11,284	11,907	313	251	63	182	10	-
W. Va.	16	33	20	-	1,074	1,176	13	59	3	3	-	-
N.C.	212	109	19	-	21,472	23,377	257	655	73	-	29	-
S.C.	151	18	-	1	11,428	12,801	36	420	11	5	20	-
Ga.	556	115	1	-	29,386	28,671	498	517	12	6	15	-
Fla.	2,136	438	10	27	49,082	50,733	477	1,032	102	49	9	-
E.S. CENTRAL	623	328	55	8	43,035	46,029	655	1,143	153	12	42	2
Ky.	75	110	17	1	4,394	4,669	443	242	55	2	17	-
Tenn.	293	38	15	-	14,745	16,123	138	524	38	-	8	-
Ala.	164	150	23	2	12,880	14,668	48	285	50	9	13	2
Miss.	91	30	-	5	11,016	10,569	26	92	10	1	4	-
W.S. CENTRAL	2,142	617	71	3	58,869	69,777	2,376	1,589	172	420	17	24
Ark.	72	14	5	-	5,809	7,938	288	86	4	14	3	-
La.	295	94	21	1	11,832	12,232	119	284	21	12	6	1
Okla.	100	56	4	-	5,609	7,606	409	142	38	22	8	-
Tex.	1,675	453	41	2	35,619	42,001	1,560	1,077	109	372	-	23
MOUNTAIN	696	170	24	3	11,549	16,120	2,661	1,291	208	137	36	1
Mont.	11	3	-	-	346	452	33	45	10	4	1	-
Idaho	9	1	-	-	284	576	116	87	6	4	-	-
Wyo.	6	2	-	-	160	356	5	12	3	-	3	-
Colo.	253	65	3	-	2,428	3,617	180	160	62	62	8	1
N. Mex.	38	13	2	1	1,159	1,760	446	184	15	1	3	-
Ariz.	232	54	10	1	4,213	5,478	1,430	513	59	44	13	-
Utah	54	21	4	1	433	494	260	106	36	18	3	-
Nev.	96	11	5	-	2,526	3,387	191	184	17	4	5	-
PACIFIC	5,162	915	104	21	58,819	87,066	7,728	3,834	646	466	78	65
Wash.	283	-	7	4	5,496	7,071	1,765	672	162	55	16	4
Oreg.	141	-	-	-	2,533	3,255	1,094	471	68	21	-	1
Calif.	4,631	804	92	17	49,425	74,692	4,442	2,599	407	378	59	52
Alaska	16	21	3	-	867	1,378	418	47	5	7	-	1
Hawaii	91	90	2	-	498	670	9	45	4	5	3	7
Guam	1	-	-	-	122	161	9	13	-	2	1	5
P.R.	1,003	58	4	1	1,056	1,607	45	214	36	34	-	3
V.I.	32	-	-	-	353	218	1	6	2	-	-	-
Amer. Samoa	-	-	-	-	65	69	3	2	-	5	-	2
C.N.M.I.	-	-	-	-	39	-	1	3	-	4	-	1

N: Not notifiable U: Unavailable C.N.M.I.: Commonwealth of the Northern Mariana Islands

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending October 15, 1988 and October 17, 1987 (41st Week)

Reporting Area	Malaria	Measles (Rubeola)					Meningococcal Infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported*		Total									
	Cum. 1988	1988	Cum. 1988	1988	Cum. 1988	Cum. 1987	Cum. 1988	1988	Cum. 1988	1988	Cum. 1988	Cum. 1987	1988	Cum. 1988	Cum. 1987
UNITED STATES	774	36	2,146	2	236	3,434	2,268	42	3,717	76	2,123	2,002	2	182	314
NEW ENGLAND	60	1	82	-	50	269	195	1	115	4	150	136	-	9	1
Maine	2	-	7	-	-	3	8	-	-	-	11	27	-	-	1
N.H.	3	1	67	-	44	162	22	1	103	4	46	36	-	5	-
Vt.	4	-	-	-	-	26	14	-	5	-	3	4	-	-	-
Mass.	31	-	1	-	2	54	87	-	7	-	57	42	-	3	-
R.I.	6	-	-	-	-	2	21	-	-	-	15	2	-	1	-
Conn.	14	-	7	-	4	22	43	-	-	-	18	25	-	-	-
MID. ATLANTIC	131	-	804	-	47	579	232	1	313	9	166	227	-	14	11
Upstate N.Y.	33	-	19	-	18	40	110	1	90	4	97	129	-	2	9
N.Y. City	71	-	44	-	5	462	57	-	99	-	5	8	-	7	1
N.J.	11	-	217	-	11	39	63	-	44	-	8	13	-	3	1
Pa.	16	-	524	-	13	38	2	-	80	5	56	77	-	2	-
E.N. CENTRAL	39	6	138	-	46	348	309	7	756	12	225	228	1	30	37
Ohio	9	-	2	-	23	5	111	4	113	6	48	57	-	1	-
Ind.	3	-	57	-	-	-	25	1	71	5	72	16	-	-	-
Ill.	2	-	55	-	16	168	67	1	283	1	37	16	1	25	26
Mich.	22	6	24	-	5	29	68	1	187	-	34	45	-	4	9
Wis.	3	-	-	-	4	146	38	-	102	-	34	94	-	-	2
W.N. CENTRAL	17	-	11	-	2	230	81	1	124	2	112	120	-	2	1
Minn.	5	-	10	-	1	39	18	-	-	-	49	13	-	-	-
Iowa	2	-	-	-	-	-	-	1	33	-	21	48	-	-	1
Mo.	6	-	1	-	1	189	28	-	32	2	19	30	-	-	-
N. Dak.	-	-	-	-	-	1	-	-	-	-	11	12	-	-	-
S. Dak.	-	-	-	-	-	-	3	-	1	-	5	3	-	-	-
Nebr.	1	-	-	-	-	-	12	-	11	-	-	1	-	-	-
Kans.	3	-	-	-	-	1	20	-	47	-	7	13	-	2	-
S. ATLANTIC	100	26	364	1	19	143	393	9	593	1	216	284	-	17	18
Del.	1	-	-	-	-	32	2	-	-	-	7	5	-	-	2
Md.	15	-	11	-	3	7	48	-	105	1	35	16	-	1	3
D.C.	11	-	-	-	-	1	8	5	242	-	1	-	-	-	1
Va.	15	23	191	-	2	1	43	-	119	-	21	49	-	11	1
W. Va.	1	-	6	-	-	-	7	-	14	-	8	38	-	-	-
N.C.	13	-	-	-	4	5	62	3	49	-	61	115	-	-	1
S.C.	9	-	-	-	-	2	35	-	5	-	1	-	-	-	-
Ga.	5	-	-	-	-	1	60	-	28	-	35	23	-	2	2
Fla.	30	3	156	1†	10	94	128	1	31	-	47	38	-	3	8
E.S. CENTRAL	14	-	56	-	-	6	220	3	433	3	90	40	-	2	3
Ky.	-	-	35	-	-	-	49	-	208	-	12	1	-	-	2
Tenn.	-	-	1	-	-	-	123	3	208	1	29	12	-	2	1
Ala.	9	-	-	-	-	4	34	-	14	2	46	21	-	-	-
Miss.	5	-	20	-	-	2	14	N	N	-	3	6	-	-	-
W.S. CENTRAL	67	-	14	-	3	447	149	10	726	-	126	258	-	11	11
Ark.	4	-	-	-	1	-	17	-	99	-	22	12	-	4	2
La.	10	-	-	-	-	-	44	-	288	-	17	46	-	-	-
Okla.	10	-	8	-	-	3	14	-	195	-	60	149	-	1	5
Tex.	43	-	6	-	2	444	74	10	164	-	27	51	-	6	4
MOUNTAIN	38	-	117	-	21	496	65	5	180	38	635	168	-	6	24
Mont.	5	-	5	-	19	128	2	-	2	-	2	6	-	-	8
Idaho	2	-	-	-	1	-	8	-	3	6	304	52	-	-	1
Wyo.	-	-	-	-	-	2	-	1	4	-	1	5	-	-	1
Colo.	13	-	112	-	1	9	15	-	30	-	20	56	-	2	-
N. Mex.	2	-	-	-	-	317	11	N	N	1	46	11	-	-	-
Ariz.	10	-	-	-	-	35	18	4	120	31	236	30	-	-	4
Utah	4	-	-	-	-	1	9	-	7	-	25	8	-	3	10
Nev.	2	-	-	-	-	3	2	-	14	-	1	-	-	1	-
PACIFIC	308	3	560	1	46	917	624	5	477	7	403	541	1	91	208
Wash.	18	-	7	-	-	41	56	1	45	5	101	76	-	-	2
Oreg.	12	-	4	1†	2	88	36	N	N	-	44	65	-	-	2
Calif.	266	3	545	-	36	784	509	4	395	2	204	196	1	63	133
Alaska	3	-	1	-	-	-	6	-	11	-	7	6	-	-	2
Hawaii	9	-	3	-	8	4	17	-	15	-	47	198	-	28	69
Guam	-	-	-	-	1	2	-	-	2	-	-	-	-	1	1
P.R.	2	-	190	-	-	755	8	1	9	-	14	16	-	3	3
V.I.	-	-	-	-	-	-	-	-	31	-	-	-	-	-	1
Amer. Samoa	-	-	-	-	-	-	2	-	3	-	-	-	-	-	-
C.N.M.I.	1	-	-	-	-	-	1	-	2	-	-	-	-	-	-

*For measles only, imported cases includes both out-of-state and international importations.
N: Not notifiable U: Unavailable †International §Out-of-state

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending October 15, 1988 and October 17, 1987 (41st Week)

Reporting Area	Syphilis (Civilian) (Primary & Secondary)		Toxic-shock Syndrome	Tuberculosis		Tula-remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1988	Cum. 1987	Cum. 1988	Cum. 1988	Cum. 1987	Cum. 1988	Cum. 1988	Cum. 1988	Cum. 1988
UNITED STATES	31,634	27,821	270	16,678	16,705	153	298	567	3,421
NEW ENGLAND	907	483	20	440	499	4	30	12	15
Maine	12	1	4	22	22	-	-	-	1
N.H.	6	3	4	8	17	-	-	-	5
Vt.	3	2	2	4	10	-	1	-	-
Mass.	340	224	8	255	277	3	17	7	-
R.I.	27	10	-	36	46	-	5	2	-
Conn.	519	243	2	115	127	1	7	3	9
MID. ATLANTIC	7,828	5,237	38	3,250	2,927	-	61	17	388
Upstate N.Y.	446	206	20	437	398	-	11	10	41
N.Y. City	5,576	3,873	6	1,758	1,399	-	37	6	-
N.J.	753	542	3	509	551	-	11	-	13
Pa.	1,053	616	9	546	579	-	2	1	332
E.N. CENTRAL	903	736	41	1,833	1,864	1	27	51	120
Ohio	84	84	28	342	344	-	5	39	5
Ind.	46	50	1	177	185	-	2	2	17
Ill.	412	393	1	785	824	-	14	7	29
Mich.	337	157	11	445	426	1	4	2	34
Wis.	24	52	-	84	85	-	2	1	35
W.N. CENTRAL	184	151	33	421	478	71	4	88	391
Minn.	17	14	5	69	95	3	2	2	113
Iowa	17	25	5	45	32	-	-	-	13
Mo.	116	71	7	213	260	43	2	54	20
N. Dak.	1	1	3	10	8	1	-	-	88
S. Dak.	-	10	3	26	23	16	-	7	112
Nebr.	27	10	4	12	21	2	-	1	14
Kans.	6	20	6	46	39	6	-	24	31
S. ATLANTIC	11,093	9,522	18	3,567	3,591	5	32	176	1,171
Del.	82	61	1	32	34	2	-	1	49
Md.	570	495	3	346	315	-	1	22	270
D.C.	535	286	-	157	132	-	1	-	6
Va.	342	242	-	318	359	2	12	16	298
W. Va.	35	10	-	60	82	-	1	2	86
N.C.	618	543	9	385	406	-	1	94	9
S.C.	561	594	3	396	372	-	-	22	96
Ga.	1,970	1,330	-	571	628	1	3	15	226
Fla.	6,380	5,961	3	1,302	1,263	-	13	4	130
E.S. CENTRAL	1,544	1,489	21	1,456	1,470	9	3	81	249
Ky.	51	14	9	388	342	5	1	28	101
Tenn.	652	572	9	416	427	3	-	37	69
Ala.	481	395	3	426	437	-	1	9	74
Miss.	360	508	-	226	264	1	1	7	5
W.S. CENTRAL	3,361	3,420	28	2,118	1,970	45	8	126	447
Ark.	193	204	2	237	238	29	-	23	70
La.	656	643	-	248	211	-	4	2	7
Okla.	122	131	9	199	185	13	-	87	30
Tex.	2,390	2,442	17	1,434	1,336	3	4	14	340
MOUNTAIN	649	544	33	448	509	11	8	11	317
Mont.	3	9	-	15	11	-	1	6	172
Idaho	3	5	5	18	26	-	-	1	11
Wyo.	1	3	-	5	2	2	-	3	36
Colo.	84	95	3	57	133	5	3	1	27
N. Mex.	43	48	2	85	78	2	1	-	11
Ariz.	127	251	14	202	211	1	3	-	36
Utah	14	22	9	18	24	1	-	-	8
Nev.	374	111	-	48	24	-	-	-	16
PACIFIC	5,185	6,239	38	3,145	3,397	7	125	5	325
Wash.	178	126	5	177	199	1	12	1	-
Oreg.	240	238	1	125	93	-	7	1	-
Calif.	4,711	5,861	31	2,686	2,903	4	103	3	315
Alaska	11	3	-	36	51	2	-	-	10
Hawaii	25	11	1	121	151	-	3	-	-
Guam	3	2	-	21	26	-	-	-	-
P.R.	562	730	-	188	236	-	5	-	56
V.I.	1	9	-	6	2	-	-	-	-
Amer. Samoa	-	-	-	3	8	-	1	-	-
C.N.M.I.	1	-	-	17	-	-	-	-	-

U: Unavailable

TABLE IV. Deaths in 121 U.S. cities,* week ending October 15, 1988 (41st Week)

Reporting Area	All Causes, By Age (Years)						P&I**
	All Ages	≥65	45-64	25-44	1-24	<1	Total
NEW ENGLAND	655	468	112	47	9	19	46
Boston, Mass.	174	105	40	16	3	10	23
Bridgeport, Conn.	42	34	3	2	1	2	-
Cambridge, Mass.	15	12	2	-	-	1	1
Fall River, Mass.	26	21	5	-	-	-	-
Hartford, Conn.§	60	41	10	7	1	1	1
Lowell, Mass.	27	19	7	1	-	-	-
Lynn, Mass.	11	10	1	-	-	-	-
New Bedford, Mass.	38	33	5	-	-	-	2
New Haven, Conn.	65	45	10	6	2	2	10
Providence, R.I.	56	45	7	3	-	1	2
Somerville, Mass.	7	6	1	-	-	-	1
Springfield, Mass.	47	31	10	5	-	1	2
Waterbury, Conn.	29	21	4	3	1	-	-
Worcester, Mass.	58	45	7	4	1	1	4
MID. ATLANTIC	2,581	1,673	509	256	63	81	114
Albany, N.Y.	47	31	7	6	1	2	1
Allentown, Pa.	29	27	1	-	1	-	-
Buffalo, N.Y.	101	68	22	7	1	3	8
Camden, N.J.	31	13	10	4	1	3	-
Elizabeth, N.J.	21	17	4	-	-	-	3
Erie, Pa.†	27	17	5	2	2	1	1
Jersey City, N.J.	63	39	17	1	1	5	-
N.Y. City, N.Y.	1,376	865	269	162	37	43	50
Newark, N.J.	103	58	22	16	2	5	5
Paterson, N.J.	39	21	8	5	-	5	1
Philadelphia, Pa.	300	198	58	27	10	7	14
Pittsburgh, Pa.†	61	44	9	7	-	1	3
Reading, Pa.	42	31	10	-	-	1	7
Rochester, N.Y.	128	93	23	5	4	3	11
Schenectady, N.Y.	26	22	3	-	1	-	-
Scranton, Pa.†	34	22	7	4	1	-	2
Syracuse, N.Y.	66	44	18	1	1	2	3
Trenton, N.J.	31	17	9	5	-	-	1
Utica, N.Y.	33	27	5	1	-	-	1
Yonkers, N.Y.	23	19	2	2	-	-	3
E.N. CENTRAL	2,261	1,483	448	180	78	72	104
Akron, Ohio	60	43	10	4	-	3	4
Canton, Ohio	30	17	8	3	-	2	10
Chicago, Ill.§	564	362	125	45	10	22	16
Cincinnati, Ohio	125	82	26	10	4	3	8
Cleveland, Ohio	137	80	31	12	8	6	1
Columbus, Ohio	130	92	19	11	5	3	2
Dayton, Ohio	106	75	19	9	3	-	7
Detroit, Mich.	264	138	63	37	14	12	9
Evansville, Ind.	55	39	9	3	2	2	5
Fort Wayne, Ind.	54	39	13	1	1	-	3
Gary, Ind.	6	4	1	-	-	1	-
Grand Rapids, Mich.	58	41	12	2	3	-	4
Indianapolis, Ind.	183	121	34	13	10	5	3
Madison, Wis.	48	30	11	1	3	3	3
Milwaukee, Wis.	125	89	21	6	5	4	9
Peoria, Ill.	48	35	5	6	1	1	4
Rockford, Ill.	51	37	9	2	1	2	5
South Bend, Ind.	49	36	8	1	2	2	3
Toledo, Ohio	101	81	14	3	2	1	7
Youngstown, Ohio	67	42	10	11	4	-	1
W.N. CENTRAL	644	445	118	48	13	20	17
Des Moines, Iowa	48	34	9	3	2	-	1
Duluth, Minn.	13	11	2	-	-	-	1
Kansas City, Kans.	51	29	10	7	2	3	-
Kansas City, Mo.	105	69	23	8	-	5	5
Lincoln, Nebr.	27	17	7	2	-	1	-
Minneapolis, Minn.	86	61	15	5	3	2	5
Omaha, Nebr.	59	38	14	2	2	3	1
St. Louis, Mo.	112	78	16	10	3	5	-
St. Paul, Minn.	72	54	8	10	-	-	1
Wichita, Kans.§	71	54	14	1	1	1	3
S. ATLANTIC	1,297	746	262	158	52	77	53
Atlanta, Ga.	168	98	37	15	2	16	2
Baltimore, Md.	184	120	27	22	7	8	8
Charlotte, N.C.	121	53	36	14	6	12	9
Jacksonville, Fla.	124	81	25	10	5	3	6
Miami, Fla.	155	73	28	32	11	10	2
Norfolk, Va.	45	29	7	5	2	2	5
Richmond, Va.	77	40	24	7	3	3	4
Savannah, Ga.	53	25	14	6	8	-	3
St. Petersburg, Fla.	75	56	13	3	1	2	6
Tampa, Fla.	77	43	10	11	3	9	4
Washington, D.C.	201	117	37	31	4	12	4
Wilmington, Del.	17	11	4	2	-	-	-
E.S. CENTRAL	703	446	148	51	28	30	34
Birmingham, Ala.	130	84	35	6	1	4	5
Chattanooga, Tenn.	60	46	7	4	-	3	3
Knoxville, Tenn.	97	62	19	7	6	3	7
Louisville, Ky.	116	73	24	5	6	8	5
Memphis, Tenn.	103	59	24	9	5	6	9
Mobile, Ala.	36	20	6	3	3	4	1
Montgomery, Ala.	33	22	7	2	-	2	-
Nashville, Tenn.	128	80	26	15	7	-	4
W.S. CENTRAL	1,008	991	354	160	71	30	57
Austin, Tex.	47	32	7	4	1	3	2
Baton Rouge, La.	28	14	9	2	2	1	-
Corpus Christi, Tex.§	48	37	10	1	-	-	1
Dallas, Tex.	156	88	36	18	11	3	6
El Paso, Tex.	76	44	14	8	7	2	4
Fort Worth, Tex	67	39	20	4	4	-	5
Houston, Tex.§	737	437	170	90	24	16	18
Little Rock, Ark.	46	31	12	1	1	-	4
New Orleans, La.	101	68	20	6	6	1	-
San Antonio, Tex.	184	117	32	18	13	4	12
Shreveport, La.	30	24	5	1	-	-	-
Tulsa, Okla.	86	60	19	7	2	-	5
MOUNTAIN	640	415	132	52	19	20	37
Albuquerque, N. Mex.	78	51	16	7	3	1	5
Colo. Springs, Colo.	38	27	4	4	1	2	5
Denver, Colo.	113	62	26	13	5	7	4
Las Vegas, Nev.	90	54	22	7	2	3	10
Ogden, Utah	14	11	3	-	-	-	1
Phoenix, Ariz.	142	97	30	10	2	3	2
Pueblo, Colo.	27	21	6	-	-	-	1
Salt Lake City, Utah	38	18	11	4	3	2	1
Tucson, Ariz.	100	74	14	7	3	2	8
PACIFIC	1,630	1,067	316	146	49	45	107
Berkeley, Calif.	22	18	2	2	-	-	2
Fresno, Calif.	80	50	13	12	3	2	4
Glendale, Calif.	12	6	3	1	1	-	-
Honolulu, Hawaii	73	46	18	4	1	4	7
Long Beach, Calif.	111	71	23	9	2	6	20
Los Angeles Calif.	331	228	55	16	19	7	15
Oakland, Calif.	52	36	9	3	2	2	2
Pasadena, Calif.	32	23	7	-	-	2	3
Portland, Oreg.	125	84	24	16	-	1	6
Sacramento, Calif.	128	83	26	15	2	2	16
San Diego, Calif.	126	69	30	15	6	6	12
San Francisco, Calif.	152	94	30	22	2	4	7
San Jose, Calif.	143	96	24	13	7	3	6
Seattle, Wash.	144	95	25	16	3	5	2
Spokane, Wash.	60	42	15	1	1	1	3
Tacoma, Wash.	39	26	12	1	-	-	2
TOTAL	12,019††	7,734	2,399	1,097	382	394	569

*Mortality data in this table are voluntarily reported from 121 cities in the United states, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

**Pneumonia and influenza.

†Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

††Total includes unknown ages.

§Data not available. Figures are estimates based on average of past available 4 weeks.

Ectopic Pregnancy — United States, 1984 and 1985

In 1984, 75,400 ectopic pregnancies* were reported in the United States, representing an increase of 8% over the number reported in 1983 (Table 1). In 1985, the number of ectopic pregnancies increased to 78,400, a 4% increase from the previous year. From 1970, when surveillance for ectopic pregnancy began, to 1985, the rate per 1000 reported pregnancies† more than tripled from 4.5 to 15.2 (Figure 1). Similarly, the rate of ectopic pregnancies per 1000 live births increased fourfold from 4.8 in 1970 to 20.9 in 1985, while the rate per 10,000 females of reproductive age (15–44 years) more than tripled from 4.2 in 1970 to 14.0 in 1985.

In 1984 and 1985, the highest rates of ectopic pregnancies (per 1000 reported pregnancies) occurred for women ≥30 years of age, as in previous years (*1*). Rates were approximately 50% higher for women of black and other races than for white women. Preliminary analysis by geographic region for 1984 and 1985 showed the highest rates of ectopic pregnancies in the Midwest and South, whereas in 1981–1983 the highest rates occurred in the West. For both time periods, the lowest rates occurred in the Northeast.

*Data were obtained from the National Hospital Discharge Survey conducted by the National Center for Health Statistics (NCHS), CDC.
†Includes live births, legally induced abortions, and ectopic pregnancies.

TABLE 1. Estimated numbers and rates of ectopic pregnancies, by year — United States, 1970–1985

Year	Number	Rates for: Reported pregnancies*	Live births†	Females 15–44 yrs§
1970	17,800	4.5	4.8	4.2
1971	19,300	4.8	5.4	4.4
1972	24,500	6.3	7.5	5.5
1973	25,600	6.8	8.2	5.6
1974	26,400	6.7	8.4	5.7
1975	30,500	7.6	9.8	6.5
1976	34,600	8.3	11.0	7.2
1977	40,700	9.2	12.3	8.3
1978	42,400	9.4	12.8	8.5
1979	49,900	10.4	14.3	9.9
1980	52,200	10.5	14.5	9.9
1981	68,000	13.6	18.7	12.7
1982	61,800	12.3	17.0	11.5
1983	69,600	14.0	19.2	12.6
1984	75,400	14.9	20.6	13.6
1985	78,400	15.2	20.9	14.0
Total	**717,100**	**10.0**	**13.0**	**9.0**

*Rate per 1000 reported pregnancies (live births, legally induced abortions, and ectopic pregnancies).
†Rate per 1000 live births.
§Rate per 10,000 females.

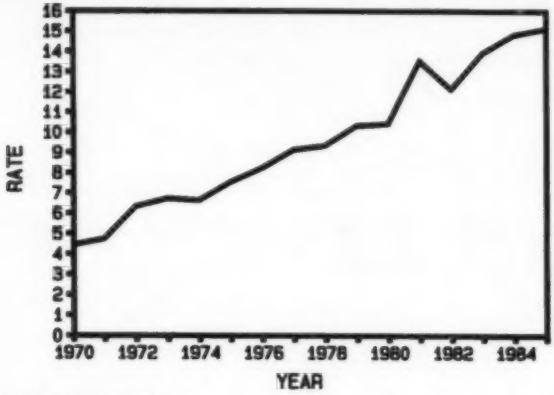
Pregnancy — Continued

In 1984, 39 women died because of ectopic pregnancy.[§] The case-fatality rate of 5.2 deaths per 10,000 ectopic pregnancies was similar to that of 5.3 in 1983. In 1985, 33 women died because of ectopic pregnancy, a case-fatality rate of 4.2.

Ectopic pregnancy-associated deaths decreased sharply from 1970 through 1976, then declined more gradually from 1977 through 1985 (Figure 2). The overall case-fatality rate decreased more than eightfold, from 35 deaths per 10,000 ectopic pregnancies in 1970 to 4.2 in 1985. During 1984 and 1985, women of black and other races had a fourfold higher risk for ectopic pregnancy-related death than did white

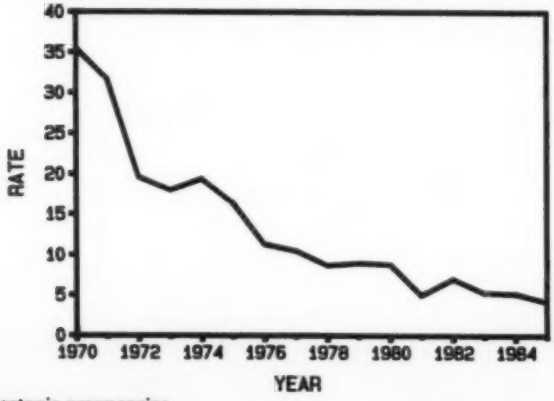
[§]Ectopic pregnancy mortality data were obtained from death certificate data compiled by NCHS.

FIGURE 1. Ectopic pregnancy rates,* by year — United States, 1970–1985



*Per 1000 reported pregnancies.

FIGURE 2. Ectopic pregnancy mortality rates,* by year — United States, 1970–1985



*Per 10,000 ectopic pregnancies.

Pregnancy – Continued

women. The racial disparity in case-fatality rates has increased since 1981–1983, when threefold higher rates were reported for women of black and other races. In 1984, as in 1981–1983, case-fatality rates were highest in the South and lowest in the West. In 1985, however, they were highest in the Northeast and lowest in the Midwest.

Reported by: Pregnancy Epidemiology Br, Research and Statistics Br, Div of Reproductive Health, Center for Health Promotion and Education, CDC.

Editorial Note: The reasons for the increasing incidence of ectopic pregnancy are not known. However, improved diagnosis (*2*), heightened awareness among physicians, the increased occurrence of pelvic inflammatory disease associated with sexually transmitted diseases (*3*), and the tendency of women to delay childbearing until later in reproductive life, when the risk of an ectopic pregnancy is greatest (*4*), may all have a bearing. An association between induced abortion and ectopic pregnancy has been hypothesized but not documented with existing U.S. data (*2*). CDC is conducting a study to investigate the possible etiologies of ectopic pregnancy. Earlier detection of ectopic pregnancies and subsequent interventions may also account for the steady decline in case-fatality rates.

In January 1988, CDC implemented the National Pregnancy Mortality Surveillance. The objectives of this new surveillance system are to identify and investigate all pregnancy-associated deaths using multiple sources of reporting and information, thus ensuring more complete ascertainment of all pregnancy-associated deaths, including those due to ectopic pregnancies.

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FIGURE I. Reported measles cases — United States, Weeks 37–40, 1988

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The data in this report are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday. The editor welcomes accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials. Such reports and any other matters pertaining to editorial or other textual considerations should be addressed to: Editor, *Morbidity and Mortality Weekly Report*, Centers for Disease Control, Atlanta, Georgia 30333.

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